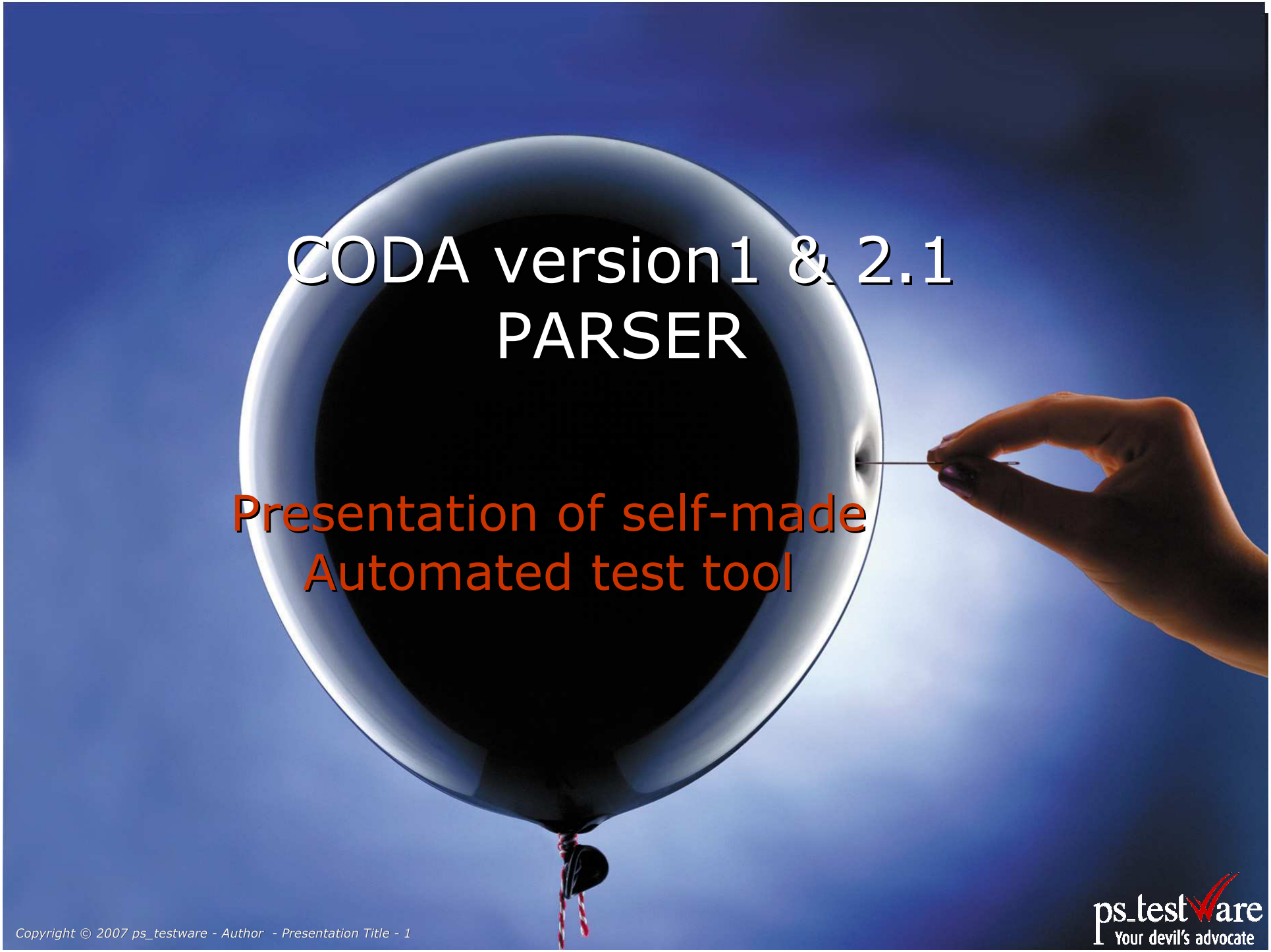

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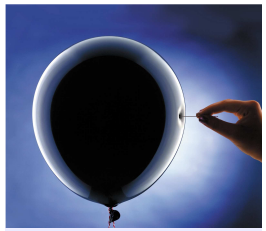

Agenda

- Context
- What is Coda?
- Tests cases example
- Tool development
- Demo
- Benefits & pitfalls

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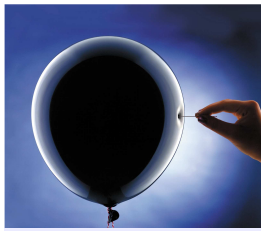

Context

- System conversion testing
  - From swift MT940 format to Coda format.
  - First time conversion testing at the client.

- Test team
  - No conversion test tools available.
  - 3 weeks for full test project (first run).
  - About 150 files to process covering 50% of test requirements.
  - Difficulty to validate file conversion with a pen.
  - Tests to be performed on a Vista workstation.
    - Full of bugs while using winSCP (Unix tool).
    - Slow time to process.

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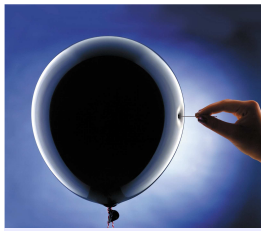

What is Coda ?

- Official CODA format from ABB
  - Standard for Belgian banks.
  - Version used at the client is 128bytes.
  - Coda 1 for Belgian accounts only.
  - Coda 2.1 for foreign accounts.
- Statement information
  - Debit & credit statement.
- Account information
  - Account balance information.
  - Account balance update.

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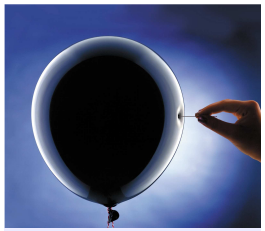

Test case example

Validate the mandatory presence of the Debit opening balance option F (valid ISO currency)	Step1	Using WinSCP, Copy TAR file P_T60F_01_xxx.tar (attached) on /gfs/gfs01/postoffice/DATA/OUTPUT/BANKING_REPORTING	File must loaded and present and the directory of Asia
	Step2	After a maximum delay of 3 min, the conversion must be processed	No more tar file is present on the directory
	Step3	Using WinSCP, go to /home/webwas/ibs6/logs to retreive the "IBSBatchreport.log"	Log file must be present and available
	Step4	Search for "P_T60F_01" string	A matching record must be found
	Step5	Verify processing result	Processing must be Completed OK
	Step6	Using WinSCP, download CODA file from /gfs/gfs02/ibs6/repository/report/downloadable_reportFiles/YYYYMM/777 where YYYY=Current year and MM=current month	File must be present and downloadable
	Step7	Verify that a record type 1 is present with the tag60F datas	Record type1 must be present with the tag60F formated datas
	Step8	Verify that opening balance mark 1 is present strating on position 43	Opening balance mark 1 must be present on position 43 of record type 1. Data length must be 1
	Step9	Verify that opening balance Amount is present starting on position 44	Opening balance amount must be present on position 44 of record type 1 and must match with amount of tag 60F MT940 file. Data length must be 15
	Step10	Verify that opening balance Date is present starting on position 59	Opening balance date must be present on position 59 of record type 1 and must match with date of tag 60F MT940 file. Data length must be 6
	Step11	Verify that ISO currency is not converted to the code record type1	Iso currency of tag60F must not be converted to the Coda 1 record type 1 format

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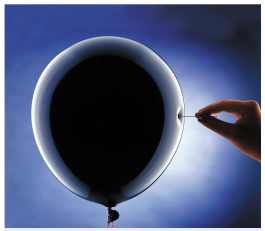

Tool development

- Specifications
  - Development based on the client specifications for MT940 and CODA version1 & 2.1
  - VB6 language.
- Versions
  - Version @ Isabel (Msexcel vbscript) :
    - ✓ Specifications hard-coded.
    - ✓ No print report available
    - ✓ Stop on first error found.
  - Version @ ps_testware :
    - ✓ Coda specifications configurable.
    - ✓ Test executed from file (treeview).
    - ✓ Full file process.
    - ✓ Print and report available.
    - ✓ Can perform up to 5000 records.

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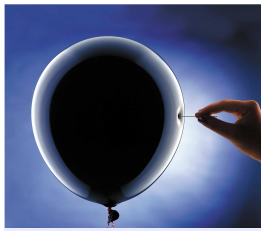
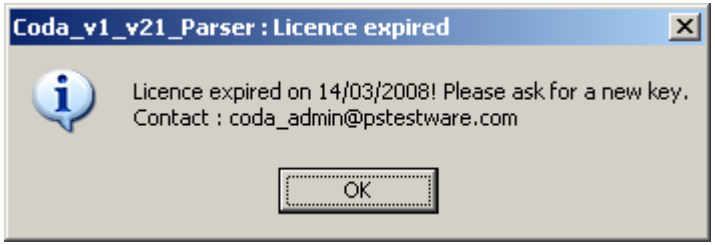


Demo : licence



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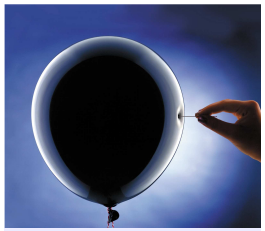
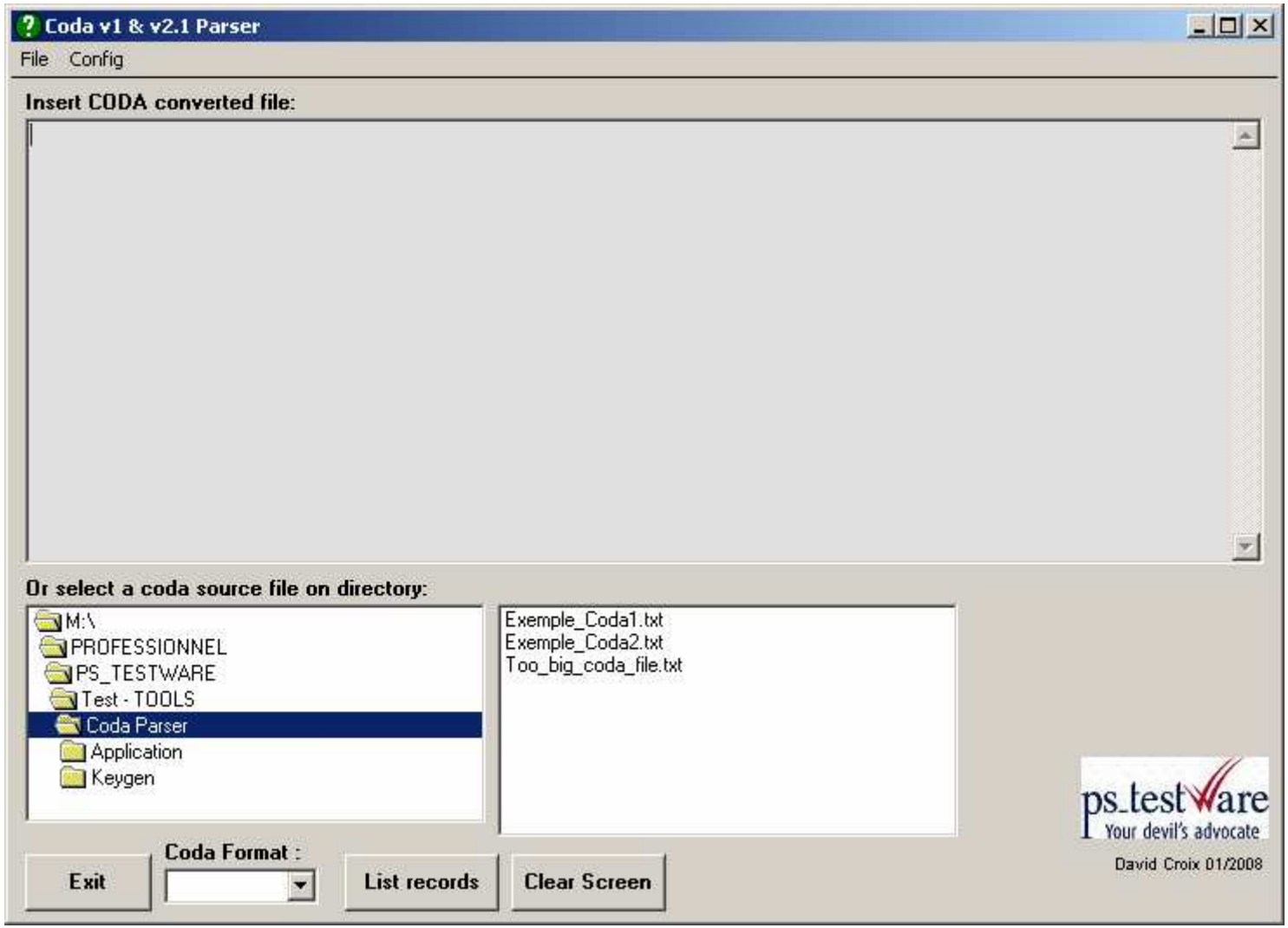


Demo : Start screen



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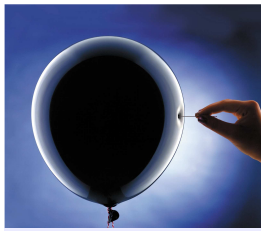

Demo : list records

CODA1 - Record type 0

List of records from CODA file :

```
0000002010800005  00000                    00000000000000000000000 00000                    1
1 002666778900076              00000000000000000141207                                  000
2100010000 CCT5018        000000000139797014120700000 1500                          1412070020001
3100010000 CCT5018        000001500DOMESTIC CAMS PAYMENT                                 0 1
3100010001 CCT5018        000001500'+ ABCDE FG H IJKL MNOPQR STU VWXYZ A BCDEFG                0 1
3100010002 CCT5018        000001500FGHIJK L                                          0 0
2100020000TTR68394        0000000052010570141207000001500HIJKLMNOPQR S TUV WX YZ 01 23         1412070020001
3100020000TTR68394        000001500MISCELLANEOUS                                       0 1
3100020001TTR68394        000001500HI JKLMN OP Q RSTUVW XYZ012 345678 9/-?                   0 1
3100020002TTR68394        000001500 -?:() . ,'+ABCDEFGH I JKL MN OP QR ST UVWXYZ ABC D EFG HI JKLMNO      0 1
3100020003TTR68394        000001500HI JK                                             0 0
2100030000 TOC5053        1000000021000000141207000001010IJK LMN                  1412070020001
3100030000 TOC5053        000001010DOMESTIC CAMS PAYMENT                                 0 1
3100030001 TOC5053        000001010LMNOPQRSTUV W  XYZ ABCDEFGHIJ                           0 1
```

Above selected record result parsing :

```
Rec id:.....          |0|
Zeros:.....           |0000|
Creation date:.....   |020108|
Bank Id:.....         |000|
Appl code:.....       |05|
duplicate:.....       | |
Blank:.....           | |
Zeros:.....           |00000|
Registration nbr:.....|       |
Name address:.....    |                  |
ID nbr of address:.....|00000000000|
ID nbr of account:.....|00000000000|
Blank:.....           | |
separate appl code:.....|00000|
Blank:.....           |                        |
Version code:.....    |1|
```

Subfield value : (Blanks values are filled with * character)

0

Lenght: 1

Run controls

Close

Error message : (Blanks values are filled with * character)

No error found

Status records control:

Total records : 66

Total statements :

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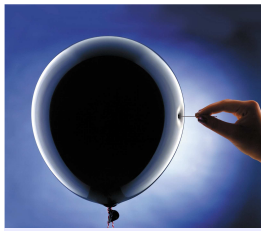

Demo : Move on records

CODA1 - Record type 0

List of records from CODA file :

```
0000002010800005  00000                    00000000000000000000 00000                    1
1 002666778900076                00000000000000000141207                          000
2100010000 CCT5018          000000000139797014120700000 1500                    1412070020001
3100010000 CCT5018          000001500DOMESTIC CAMS PAYMENT                          0 1
3100010001 CCT5018          000001500'+ ABCDE FG H IJKL MNOPQR STU VWXYZ A BCDEFG                  0 1
3100010002 CCT5018          000001500FGHIJK L                                  0 0
2100020000TTR68394          000000005201057014120700000 1500HIJKLMNOPQR S TUV WX YZ 01 23          1412070020001
3100020000TTR68394          000001500MISCELLANEOUS                                  0 1
3100020001TTR68394          000001500HI JKLMN OP Q RSTUVW XYZ012 345678 9/-?                       0 1
3100020002TTR68394          000001500 -?:() . ,'+ABCDEFGH I JKL MN OP QR ST UVWXYZ ABC D EFG HI JKLMNO          0 1
3100020003TTR68394          000001500HI JK                                  0 0
2100030000 TOC5053          100000002100000014120700000 1010IJK LMN                1412070020001
3100030000 TOC5053          000001010DOMESTIC CAMS PAYMENT                          0 1
3100030001 TOC5053          000001010LMNOPQRSTUV W  XYZ ABCDEFGHIJ                       0 1
```

Above selected record result parsing :

```
Rec ID:.....                |3|
Article code:.....          |1|
Seq nbr:.....               |0001|
Detail nbr:.....            |0001|
ref nbr:.....               | CCT5018    |
Extension of ref nbr:.....  |      |
Transaction code:.....      |00000150|
Msg zone structure code:.....|0|
Message:.....               |'+ ABCDE FG H IJKL MNOPQR STU VWXYZ A BCDEFG                  |
Blank:.....                 |         |
Code next:.....             |0|
Blank.....                  | |
Code link with next:.....   |1|
```

Subfield value : (Blanks values are filled with * character)

'+*ABCDE*FG*H*IJKL*MNOPQR*STU*VWXYZ*A*BCDEFG**********

Lenght: 73

Run controls

Close

Error message : (Blanks values are filled with * character)

No error found

Status records control:

Total records : 66

Total statements :

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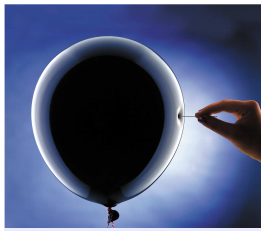
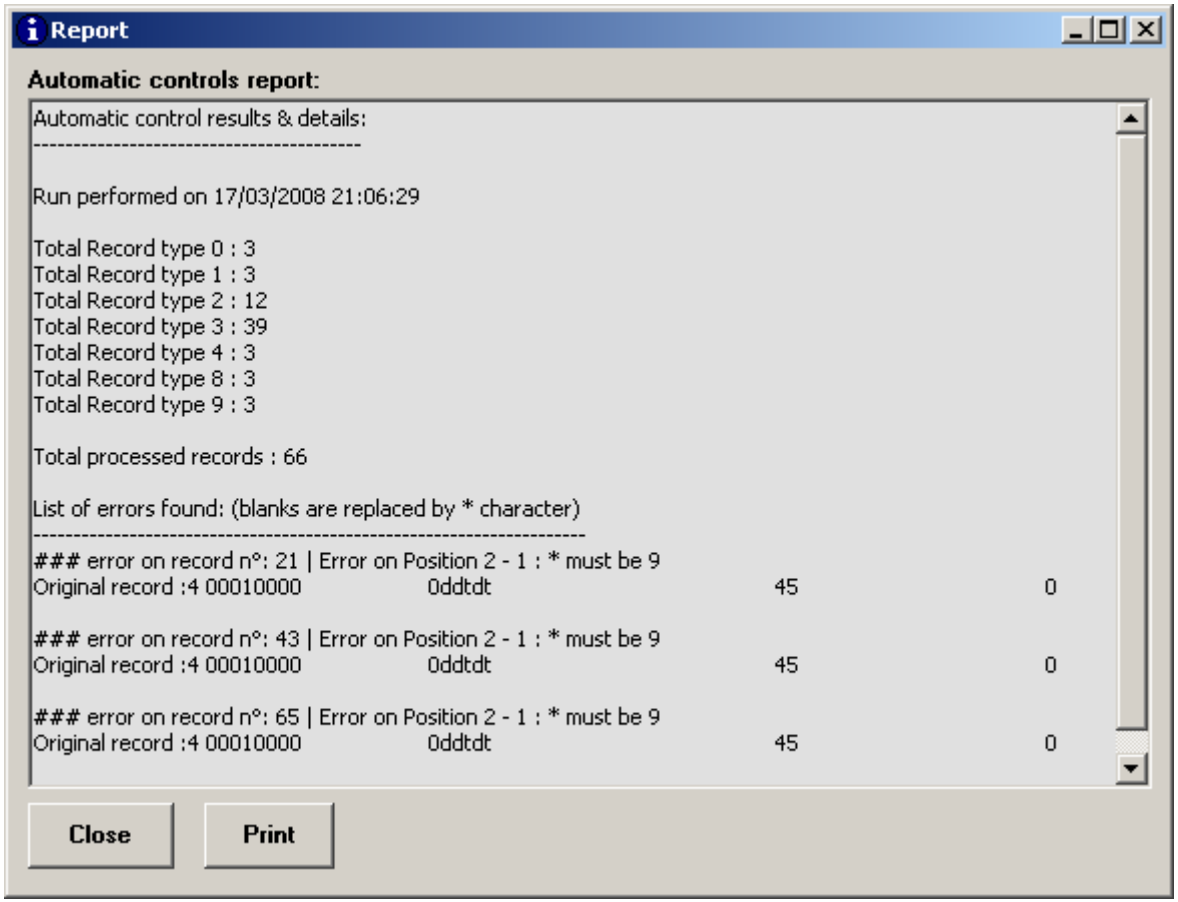


Demo : Automatic run : report



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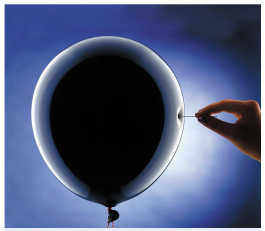

Demo : Configuration 1/2

Configuration of CODA version 1

Select record type : Record 0

	tag	start	lenght	ctrl	value
▶	Rec id:	1	1	0	
	Zeros:	2	4	1	0000
	Creation date:	6	6	0	
	Bank Id:	12	3	0	
	Appl code:	15	2	1	05
	duplicate:	17	1	1	*
	Blank:	18	2	1	**
	Zeros:	20	5	1	00000
	Registration nbr:	25	10	1	
	Name address:	35	26	1	**********
	ID nbr of address:	61	11	1	00000000000
	ID nbr of account:	72	11	1	00000000000
	Blank:	83	1	1	*
	separate appl code:	84	5	1	00000
	Blank:	89	39	1	**********
	Version code:	128	1	0	
*					

Close | Control Configuration

Be carreful while updating, adding or deleting data. All changes will be automatically be done on the source database. Bad values will impact the parse result and control. Blank value MUST be equal to * character.

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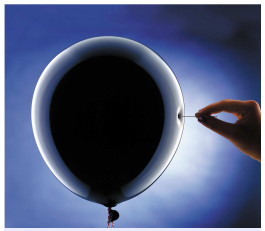
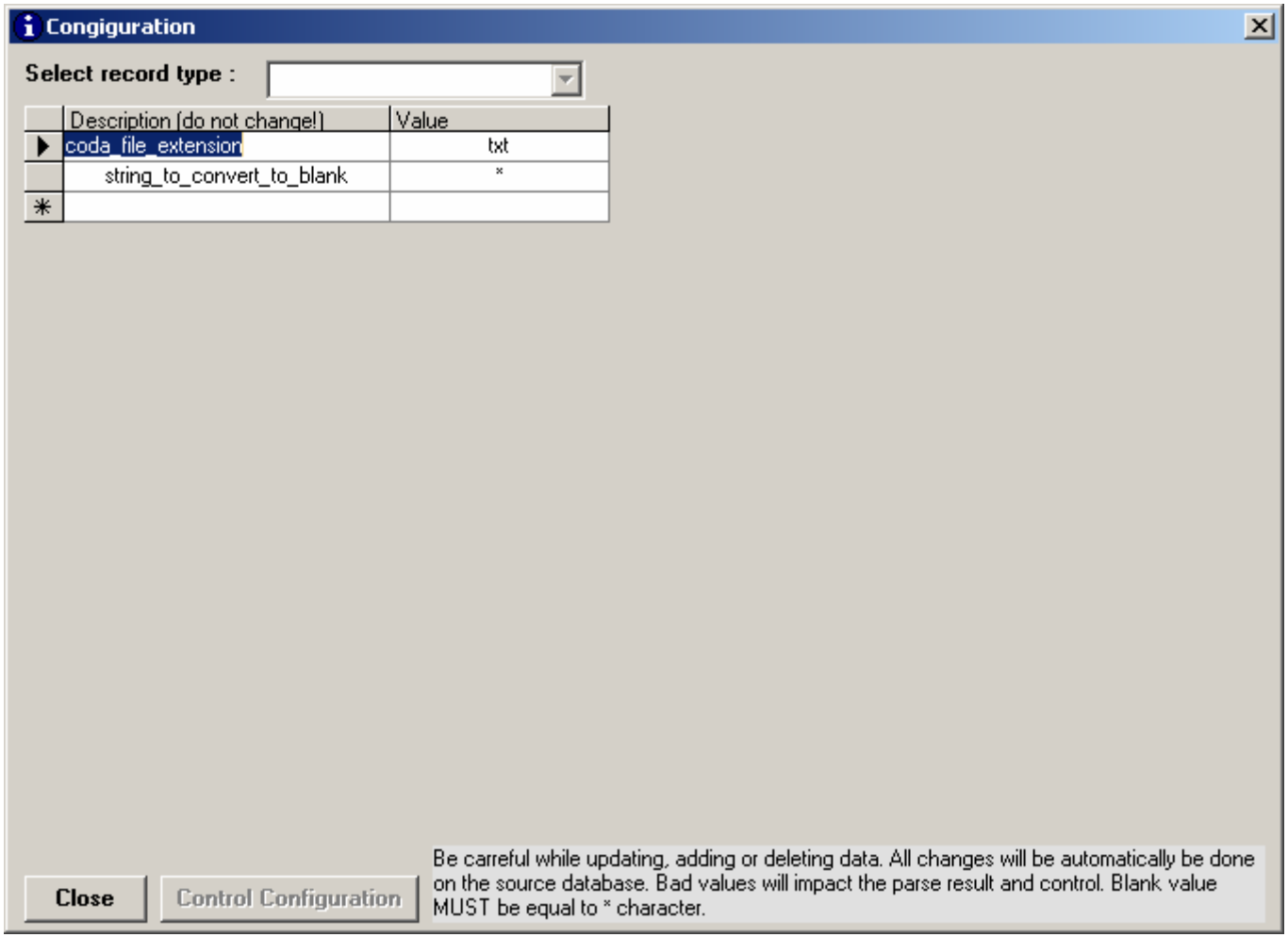


Demo : Configuration 2/2



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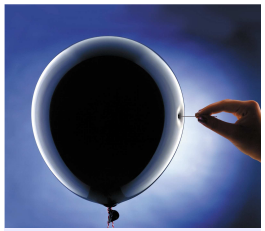

Demo : Live demo

Coda v1 & v2.1 Parser

File Config

Insert CODA converted file:

```
000002010800005  00000                    00000000000000000000000 00000                    1
1 002666778900076              00000000000000000141207                                  000
2100010000 CCT5018        000000000139797014120700000150O                                 1412070020001
3100010000 CCT5018        000001500DOMESTIC CAMS PAYMENT                                      0 1
3100010001 CCT5018        000001500'+ ABCDE FG H IJKL MNOPQR STU VWXYZ A BCDEFG                    0 1
3100010002 CCT5018        000001500FGHIJK L                                               0 0
2100020000TTR68394        000000005201057014120700000150OHIJKLMNOPQR S TUV WX YZ 01 23             1412070020001
3100020000TTR68394        000001500MISCELLANEOUS                                              0 1
3100020001TTR68394        000001500HI JKLMN OP Q RSTUVW XYZ012 345678 9/-?                        0 1
3100020002TTR68394        000001500 -?:() . ,'+ABCDEFGH I JKL MN OP QR ST UVWXYZ ABC D EFG HI JKLMNO          0 1
3100020003TTR68394        000001500HI JK                                                  0 0
2100030000 TOC5053        100000002100000014120700000101OIJK LMN                              1412070020001
3100030000 TOC5053        000001010DOMESTIC CAMS PAYMENT                                      0 1
3100030001 TOC5053        000001010LMNOPQRSTUV W  XYZ ABCDEFGHIJ                                0 1
3100030002 TOC5053        0000010106789/-? : ().,'+ABCDE F  GHI JKL M                          0 0
2100040000TTR68483        000000000294114014120700000150OHIJKLM NOPQRS TUVW XYZ                    1412070020001
3100040000TTR68483        000001500MISCELLANEOUS                                              0 1
3100040001TTR68483        000001500GH IJKLM NO P QRSTUV WXYZ01 2345 678                            0 1
3100040002TTR68483        000001500IJKLMN O PQRSTU VWXYZ0 1234 567 89/-?:().,'+ABC                      0 0
```

Or select a coda source file on directory:

- M:\
  - PROFESSIONNEL
    - PS_TESTWARE
      - Test - TOOLS
        - Coda Parser
          - Application
          - Keygen

Exemple_Coda1.txt
Exemple_Coda2.txt
Too_big_coda_file.txt

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David Croix 01/2008

Exit | Coda Format : version 1 | List records | Clear Screen

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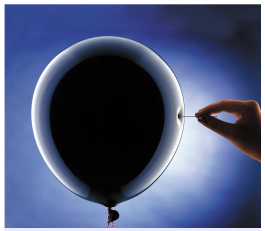

Benefits

- Customer Integration test team
  - First CODA test tool available
  - Direct analyse of records
  - Quality of validation of records
  - Gain on test execution time.
  - Easy maintenance
- Ps_testware
  - Freeware from ps_testware
    - Limited on time with licence
    - Can be improved with new format

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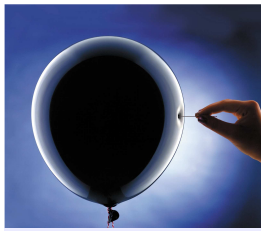

Pitfalls

- Customer Integration team
  - New test tool to manage (who?)
  - Workshop for improvement out of scope of actual projects
- Ps_testware
  - Tool need to be documented & stored
  - # of projects using Coda format?
  - Cost for maintenance?

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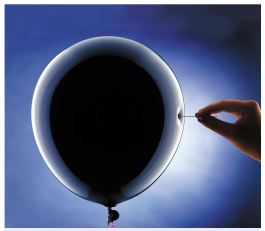

New release ?

- Implementation of parsing new standart format
  - Swift file format (MT101, MT940)
  - others

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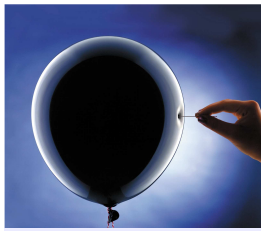

Close

- Questions / Remarks
- Suggestions
- Improvements
- Realistic to other projects?

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